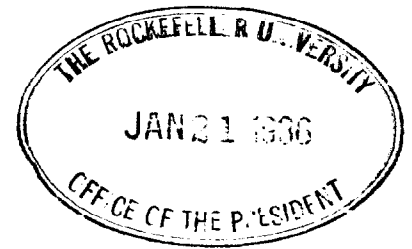




מכון ויצמן למדע
THE WEIZMANN INSTITUTE OF SCIENCE

רחובות · ישראל 76100 REHOVOT · ISRAEL



Department of Virology

המחלקה לוירולוגיה

YG/pw

January 13, 1986

Professor Joshua Lederberg
President
The Rockefeller University
New York, N.Y. 10021
U. S. A.

Dear Dr. Lederberg:

My research group at the Weizmann Institute of Science has been engaged, for some time, in studies concerning the molecular biology of Down's syndrome. What we would like to understand is how trisomy 21q22 produces Down's syndrome. During the last couple of years we have isolated and cloned the gene encoding the Cu/Zn-superoxide dismutase (SOD-1) which as you probably know resides at the 21q22 segment of chromosome 21. This gene, according to our results, is overexpressed in various organs of Down's syndrome fetuses and, more recently, we obtained indications, from experiments with cell cultures, that it may be involved in some of the clinical symptoms associated with the syndrome (see enclosed preprint). In parallel, we have started microinjecting the human gene into mouse embryos to produce transgenic mice overexpressing the human SOD-1. While being excited and impatient to wait for the outcome of these experiments, I was stirred and humbled to find out that twenty years ago, in your article "Experimental Genetics and Human Evolution" (Oct. 1966, Bull. Atom. Sci.) you have envisaged this experimental approach. So I have not only studied your classical experiments in molecular genetics during my university years, but am now performing experiments which you have predicted when I was a student. This is really something to admire and I do.

Sincerely yours,

Yoram Groner, Ph.D.
Professor
Department of Virology.

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